IN THE CLAIMS:

1. (Currently Amended) A multichannel wavelength-division multiplex fiber optic transmission system, comprising:

an optical transmitter,

an optical receiver connected to the optical transmitter by an optical line, the line including:

at least one optical fiber, and

at least one set of channel regenerators,

wherein each one of the set of channel regenerators regenerates only a predetermined respective group of channels, each respective group forming only a subset of said set of channels, and each channel of the group is predetermined based on channel wavelength.

2. (Previously Presented) The system claimed in claim 1, wherein the number of channel regenerators is a submultiple of the number of channels.

3. (Original) The system claimed in claim 1 wherein each group includes only one channel.

4. (Original) The system claimed in claim 3 wherein each regenerator is an optical regenerator.

5. (Previously Presented) The system claim in claim 1 wherein at least one group ~~includes a plurality of the channels.~~

6. (Currently Amended) The system claim in claim 4-5, wherein the regenerator for the group having the plurality of channels comprises:

means for synchronizing the plurality of channels, and

an optical regenerator unit performing the regenerating of the plurality of channels.

7. (Previously Presented) The system claimed in claim 4, wherein each channel regenerator comprises a synchronous modulator.

8. (Previously Presented) The system claimed in claim 1, wherein each channel regenerator comprises a demultiplexer and a multiplexer so as independently to process channels which are to be regenerated and channels which are not to be regenerated.

9. (Previously Presented) The system claimed in claim 1, wherein each channel regenerator comprises an inserter/extractor system for isolating channels to be regenerated.

10. (Previously Presented) The system claimed in claim 1, wherein each channel regenerator comprises a compensator amplifier compensating intensity differences between regenerated and non-regenerated channels.

11. (Previously Presented) The system as claimed in claim 1 further comprising supervisory means using a dedicated channel.

12. (Previously Presented) The system claimed in claim 11, wherein each channel regenerator comprises:

means for separating said dedicated channel from the other channels,

a supervisory unit for transmitting information relating to the status of said regenerator on said dedicated channel, and

means for demultiplexing said dedicated channel with the other channels.

13. (Previously Presented) The system claimed in claim 12, wherein:

each channel regenerator includes a regenerator unit for regenerating the channels of a group of channels, and

the supervisory unit receives information from said regenerator unit and a portion of the regenerated signal delivered by said regenerator unit.

14. (Previously Presented) The system as claimed in claim 1 further comprising:

a plurality of spaced optical amplifiers, and

a plurality of spaced optical regenerators,

wherein the spacing of said optical regenerators is a multiple of the spacing of said optical amplifiers.